Please amend Claims 1, 5 to 7, 9, 11 and 13-16 as follows (a marked-up version showing all changes being made is included with this amendment):

1. (Amended) An optical fiber provided with a refractive index profile having a central core; a middle part provided around the outer periphery of said central core and having a lower refractive index than that of said central core; and a cladding provided around the periphery of said middle part and having a higher refractive index than said middle part and a lower refractive index than said central core;

wherein said optical fiber has an effective core area of at least 120 μm^2 in an employed wavelength band selected from the range of 1.53 to 1.63 μm, and has a cut-off wavelength that is capable of substantially single mode propagation in said employed wavelength band, and

when the radius of the central core is designated as r_1 and the radius of the middle part is designated as r_2, then $3.0 \leq r_2/r_1 \leq 5.0$, and, when specific refractive index differences for the central core and the middle part are designated as Δ_1 and Δ_2 respectively where the refractive index of the cladding is taken as the standard, then Δ_1 is at most 0.30% and Δ_2 is -0.05 to -0.15%.

5. (Amended) An optical fiber according to claim 1, characterized in that the increase in the sandpaper tension winding loss is at most 10 dB/km.

6. (Amended) An optical fiber according to claim 1, characterized in that the increase in the sandpaper tension winding loss is at most 1dB/km.

7. (Amended) An optical fiber according to claim 1, characterized in that the effective core area is 120 to 150 μm^2, and the increase in the sandpaper tension winding loss is at most 0.3 dB/km.

8. CANCELLED.

9. (Amended) An optical fiber according to claim 1, characterized in that Δ_1 is at most 0.26%.

10. CANCELLED.

11. (Amended) An optical fiber provided with a refractive index profile having a central core; a middle part provided around the outer periphery of said central core and having a lower refractive index than that of said central core; a cladding provided around the periphery of said middle part and having a higher refractive index than said middle part and a lower refractive index than said central core; and a ring core provided between the middle part and the cladding and having a higher refractive index than that of said middle part and said cladding and a lower refractive index than that of the central core;

wherein said optical fiber has an effective core area of 120 μm^2 or more in an employed wavelength band selected from the range of 1.53 to 1.63 μm, and has a cut-

off wavelength that is capable of substantially single mode propagation in said employed wavelength band, and

when the radius of the central core is designated as r_1, the radius of the middle part is designated as r_2, and the radius of the ring core is designated as r_3, then $3.0 \leq r_2/r_1 \leq 4.0$ and $4.0 \leq r_3/r1 \leq 5.0$, and when the specific refractive index differences for the central core, the middle part, and the ring core are designated as Δ_1, Δ_2 and Δ_3 respectively where the refractive index of the cladding is taken as the standard, then Δ_1 is at most0.35%, Δ_2 is 0 to 0.2% and Δ_3 is +0.05 to 0.2%.

12. CANCELLED.

9 ~~13~~ (Amended) An optical transmission system characterized in that a dispersion compensating optical fiber is disposed to the side of the optical fiber according to claim 1 at which the optical signal is emitted, said dispersion compensating optical fiber compensating one or both of this optical fiber wavelength dispersion value and dispersion slope.

13 ~~14~~. (Amended) An optical transmission system including a dispersion compensating optical fiber disposed to the side of an optical fiber at which the optical signal is emitted, wherein

the optical fiber is provided with a refractive index profile having a central core; a middle part provided

around the outer periphery of said central core and having a lower refractive index than that of said central core; and a cladding provided around the periphery of said middle part and having a higher refractive index than said middle part and a lower refractive index than said central core; and the optical fiber has an effective core area of at least 120 μm^2 in an employed wavelength band selected from the range of 1.53 to 1.63 μm, and has a cut-off wavelength that is capable of substantially single mode propagation in said employed wavelength band; and

said dispersion compensating optical fiber compensates one or both of the optical fiber wavelength dispersion value and dispersion slope, and is provided with a core and a cladding that is provided around the outer periphery of said core, said core consisting of a central core having a higher refractive index than said cladding, a middle part that is provided around the outer periphery of said central core and has a lower refractive index than said cladding, and a ring core that is provided around the outer periphery of said middle core part and has a higher refractive index than said cladding; in which

when the radius and the relative refractive index difference, with the cladding taken as the standard, for the central core, middle part, and ring core are designated as (r_1, Δ_1), (r_2, Δ_2) and (r_3,Δ_3), respectively, then r_1 is 2 to 3 ~~mm~~ μm, Δ_1 is 0.9 to 1.5%, Δ_2 is -0.35 to -0.45%, Δ_3 is 0.2 to 1.2%, r_2/r_1 is 2.0 to 3.5, and r_3/r_1 is 3.0 to 5.0;

a cut-off wavelength is provided that is capable of substantially single mode propagation, in which the effective core area is at least 20 μm^2, the bending loss is at most 40 dB/m, and the wavelength dispersion is -65 to -45 ps/nm/km, in an employed wavelength band selected from the range 1.53 μm to 1.63 μm; and

5 Amend

the dispersion slope compensation ratio is in the range of 80 to 120% when compensating said optical fiber with a length of the dispersion compensating optical fiber capable of compensating to zero the wavelength dispersion of the optical fiber to be compensated.

10 ~~15.~~ (Amended) An optical transmission system according to claim ~~13~~ 9, characterized in that the dispersion compensating optical fiber has an effective core are being at least 25 μm^2.

11 ~~16.~~ (Amended) An optical transmission system according to claim ~~13~~ 9, wherein the average wavelength dispersion value when an optical fiber and a dispersion compensating optical fiber are combined is in the range of -6 to +6 ps/nm/km.